

Fig. 1 is a perspective view which shows a cask according to a first embodiment of the present invention. Fig. 2 is a cross sectional view in an axial direction of the cask shown in Fig. 1. Fig. 3 is a cross sectional view in a diametrical direction of the cask shown in Fig. 1. A cask 100 according to the first embodiment is structured such that an inner surface of a cavity 102 of a barrel main body 101 is machined in conformity with an outer peripheral shape of a basket 130. The machining of the inner surface of the cavity 102 is milled by an exclusive working apparatus mentioned below. The barrel main body 101 and a bottom plate 104 correspond to forged products made of a carbon steel having a γ ray shielding function. In this case, in place of the carbon steel, a stainless steel may be employed. The barrel main body 101 and the bottom plate 104 are bonded by welding. Further, in order to secure a sealing performance as a pressure vessel, a metal gasket may be provided between a primary cover 110 and the barrel main body 101.

IN THE CLAIMS

A clean copy of the claims incorporating any amendment is shown below.

Please amend Claims 1-5 and add new Claims 13-15 as follows:

1. (Amended) A cask comprising:

a basket including a plurality of rectangular plate members capable of absorbing neutrons and alternately piled up vertically, the plurality of rectangular plate members each having a plurality of cutting sections for mutually engaging the plurality of rectangular plate members, the rectangular plate members forming a plurality of cells, the basket having an outer shape that has an angular cross section with step portions [in such a manner as to mutually insert said cutting sections to each other];

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a barrel main body which shields γ rays and has an inner side forming a cavity, the cavity having a cross section which corresponds with the angular cross section of the basket; a neutron shielding body provided in an outer periphery of the barrel main body, wherein a spent fuel assembly is stored in each of the cells of the basket inserted in the cavity.

- 2. (Amended) The cask according to claim 1, wherein only portions of the cavity have the cross section that corresponds with the angular cross section of the basket.
- 3. (Amended) The cask according to claim 1, further comprising a plurality of dummy pipes provided along and in contact with the step portions of the basket, wherein the cross section of the cavity corresponds with a cross section of an outer shape formed by the plurality of dummy pipes and the basket in contact with each other, and the plurality of dummy pipes are inserted within the cavity together with the basket.
- 4. (Amended) The cask according to claim 3, wherein both ends of each of the plurality of dummy pipe are elosed.
- 5. (Amended) The eask according to claim 4, wherein the plurality of dummy pipes each includes a heat conduction medium therein.
- 13. (New) The cask according to claim 5, wherein the heat conduction medium in the plurality of dummy pipes comprises a helium gas.
- 14. (New) The cask according to claim 3, wherein the plurality of dummy pipes comprise an aluminum alloy containing boron.
 - 15. (New) A cask comprising:

a basket having an outer shape that has an angular cross section with step-like portions; and

a barrel main body having an inner side that forms a cavity, the cavity having a cross section that corresponds with the angular cross section of the basket.